

PCT09

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/674,292

DATE: 09/05/2001

TIME: 15:00:43

Input Set : A:\Hu22nat1.app

Output Set : N:\CRF3\09052001\I674292.raw

3 <110> APPLICANT: McMahon, Andrew P
 4 Lee, Scott K
 5 Takada, Shinji
 7 <120> TITLE OF INVENTION: Induction of Neuronal Regeneration
 9 <130> FILE REFERENCE: 21508-022-NATL
 11 <140> CURRENT APPLICATION NUMBER: 09/674,292
 12 <141> CURRENT FILING DATE: 1998-04-30
 14 <150> PRIOR APPLICATION NUMBER: PCT/US 98/08716
 15 <151> PRIOR FILING DATE: 1998-04-30
 17 <160> NUMBER OF SEQ ID NOS: 11
 19 <170> SOFTWARE: PatentIn Ver. 2.1
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 370
 23 <212> TYPE: PRT
 24 <213> ORGANISM: Homo sapiens
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 31 20 25 30
 33 Arg Trp Trp Gly Ile Val Asn Val Ala Ser Ser Thr Asn Leu Leu Thr
 34 35 40 45
 36 Asp Ser Lys Ser Leu Gln Leu Val Leu Glu Pro Ser Leu Gln Leu Leu
 37 50 55 60
 39 Ser Arg Lys Gln Arg Arg Leu Ile Arg Gln Asn Pro Gly Ile Leu His
 40 65 70 75 80
 42 Ser Val Ser Gly Gly Leu Gln Ser Ala Val Arg Glu Cys Lys Trp Gln
 43 85 90 95
 45 Phe Arg Asn Arg Arg Trp Asn Cys Pro Thr Ala Pro Gly Pro His Leu
 46 100 105 110
 48 Phe Gly Lys Ile Val Asn Arg Gly Cys Arg Glu Thr Ala Phe Ile Phe
 49 115 120 125
 51 Ala Ile Thr Ser Ala Gly Val Thr His Ser Val Ala Arg Ser Cys Ser
 52 130 135 140
 54 Glu Gly Ser Ile Glu Ser Cys Thr Cys Asp Tyr Arg Arg Arg Gly Pro
 55 145 150 155 160
 57 Gly Gly Pro Asp Trp His Trp Gly Gly Cys Ser Asp Asn Ile Asp Phe
 58 165 170 175
 60 Gly Arg Leu Phe Gly Arg Glu Phe Val Asp Ser Gly Glu Lys Gly Arg
 61 180 185 190
 63 Asp Leu Arg Phe Leu Met Asn Leu His Asn Asn Glu Ala Gly Arg Thr
 64 195 200 205
 66 Thr Val Phe Ser Glu Met Arg Gln Glu Cys Lys Cys His Gly Met Ser
 67 210 215 220
 69 Gly Ser Cys Thr Val Arg Thr Cys Trp Met Arg Leu Pro Thr Leu Arg
 70 225 230 235 240
 72 Ala Val Gly Asp Val Leu Arg Asp Arg Phe Asp Gly Ala Ser Arg Val

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73          245          250          255
75 Leu Tyr Gly Asn Arg Gly Ser Asn Arg Ala Ser Arg Ala Glu Leu Leu
76          260          265          270
78 Arg Leu Glu Pro Glu Asp Pro Ala His Lys Pro Pro Ser Pro His Asp
79          275          280          285
81 Leu Val Tyr Phe Glu Lys Ser Pro Asn Phe Cys Thr Tyr Ser Gly Arg
82          290          295          300
84 Leu Gly Thr Ala Gly Thr Ala Gly Arg Ala Cys Asn Ser Ser Ser Pro
85 305          310          315          320
87 Ala Leu Asp Gly Cys Glu Leu Leu Cys Cys Gly Arg Gly His Arg Thr
88          325          330          335
90 Arg Thr Gln Arg Val Thr Glu Arg Cys Asn Cys Thr Phe His Trp Cys
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110          20          25          30
112 Thr Gly Gly Ser Ser Arg Val Met Cys Asp Asn Val Pro Gly Leu Val
113          35          40          45
115 Ser Ser Gln Arg Gln Leu Cys His Arg His Pro Asp Val Met Arg Ala
116          50          55          60
118 Ile Ser Gln Gly Val Ala Glu Trp Thr Ala Glu Cys Gln His Gln Phe
119 65          70          75          80
121 Arg Gln His Arg Trp Asn Cys Asn Thr Leu Asp Arg Asp His Ser Leu
122          85          90          95
124 Phe Gly Arg Val Leu Leu Arg Ser Ser Arg Glu Ser Ala Phe Val Tyr
125          100          105          110
127 Ala Ile Ser Ser Ala Gly Val Val Phe Ala Ile Thr Arg Ala Cys Ser
128          115          120          125
130 Gln Gly Glu Val Lys Ser Cys Ser Cys Asp Pro Lys Lys Met Gly Ser
131          130          135          140
133 Ala Lys Asp Ser Lys Gly Ile Phe Asp Trp Gly Gly Cys Ser Asp Asn
134 145          150          155          160
136 Ile Asp Tyr Gly Ile Lys Phe Ala Arg Ala Phe Val Asp Ala Lys Glu
137          165          170          175
139 Arg Lys Gly Lys Asp Ala Arg Ala Leu Met Asn Leu His Asn Asn Arg
140          180          185          190
142 Ala Gly Arg Lys Ala Val Lys Arg Phe Leu Lys Gln Glu Cys Lys Cys
143          195          200          205
145 His Gly Val Ser Gly Ser Cys Thr Leu Arg Thr Cys Trp Leu Ala Met

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146      210      215      220
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149 225      230      235      240
151 Ala Ile Gln Val Val Met Asn Gln Asp Gly Thr Gly Phe Thr Val Ala
152      245      250      255
154 Asn Glu Arg Phe Lys Lys Pro Thr Lys Asn Asp Leu Val Tyr Phe Glu
155      260      265      270
157 Asn Ser Pro Asp Tyr Cys Ile Arg Asp Arg Glu Ala Gly Ser Leu Gly
158      275      280      285
160 Thr Ala Gly Arg Val Cys Asn Leu Thr Ser Arg Gly Met Asp Ser Cys
161      290      295      300
163 Glu Val Met Cys Cys Gly Arg Gly Tyr Asp Thr Ser His Val Thr Arg
164 305      310      315      320
166 Met Thr Lys Cys Gly Cys Lys Phe His Trp Cys Cys Ala Val Arg Cys
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169 Gln Asp Cys Leu Glu Ala Leu Asp Val His Thr Cys Lys Ala Pro Lys
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186      20      25      30
188 Ser Ser Leu Ser Thr Gln Pro Ile Leu Cys Ala Ser Ile Pro Gly Leu
189      35      40      45
191 Val Pro Lys Gln Leu Arg Phe Cys Arg Asn Tyr Val Glu Ile Met Pro
192      50      55      60
194 Ser Val Ala Glu Gly Val Lys Ala Gly Ile Gln Glu Cys Gln His Gln
195 65      70      75      80
197 Phe Arg Gly Arg Arg Trp Asn Cys Thr Thr Val Ser Asn Ser Leu Ala
198      85      90      95
200 Ile Phe Gly Pro Val Leu Asp Lys Ala Thr Arg Glu Ser Ala Phe Val
201      100      105      110
203 His Ala Ile Ala Ser Ala Gly Val Ala Phe Ala Val Thr Arg Ser Cys
204      115      120      125
206 Ala Glu Gly Ser Ala Ala Ile Cys Gly Cys Ser Ser Arg Leu Gln Gly
207      130      135      140
209 Ser Pro Gly Glu Gly Trp Lys Trp Gly Gly Cys Ser Glu Asp Ile Glu
210 145      150      155      160
212 Phe Gly Gly Met Val Ser Arg Glu Phe Ala Asp Ala Arg Glu Asn Arg
213      165      170      175
215 Pro Asp Ala Arg Ser Ala Met Asn Arg His Asn Asn Glu Ala Gly Arg
216      180      185      190
218 Gln Ala Ile Ala Ser His Met His Leu Lys Cys Lys Cys His Gly Leu

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219          195          200          205
221 Ser Gly Ser Cys Glu Val Lys Thr Cys Trp Trp Ser Gln Pro Asp Phe
222          210          215          220
224 Arg Thr Ile Gly Asp Phe Leu Lys Asp Lys Tyr Asp Ser Ala Ser Glu
225 225          230          235          240
227 Met Val Val Glu Lys His Arg Glu Ser Arg Gly Trp Val Glu Thr Leu
228          245          250          255
230 Arg Pro Arg Tyr Thr Tyr Phe Lys Val Pro Thr Glu Arg Asp Leu Val
231          260          265          270
233 Tyr Tyr Glu Ala Ser Pro Asn Phe Cys Glu Pro Asn Pro Glu Thr Gly
234          275          280          285
236 Ser Phe Gly Thr Arg Asp Arg Thr Cys Asn Val Ser Ser His Gly Ile
237          290          295          300
239 Asp Gly Cys Asp Leu Leu Cys Cys Gly Arg Gly His Asn Ala Arg Thr
240 305          310          315          320
242 Glu Arg Arg Arg Glu Lys Cys His Cys Val Phe His Trp Cys Cys Tyr
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262          20          25          30
264 Gly Ala Thr Ile Ile Cys Asn Lys Ile Pro Gly Leu Ala Pro Arg Gln
265          35          40          45
267 Arg Ala Ile Cys Gln Ser Arg Pro Asp Ala Ile Ile Val Ile Gly Glu
268          50          55          60
270 Gly Ser Gln Met Gly Leu Asp Glu Cys Gln Phe Gln Phe Arg Asn Gly
271 65          70          75          80
273 Arg Trp Asn Cys Ser Ala Leu Gly Glu Arg Thr Val Phe Gly Lys Glu
274          85          90          95
276 Leu Lys Val Gly Ser Arg Asp Gly Ala Phe Thr Tyr Ala Ile Ile Ala
277          100          105          110
279 Ala Gly Val Ala His Ala Ile Thr Ala Ala Cys Thr His Gly Asn Leu
280          115          120          125
282 Ser Asp Cys Gly Cys Asp Lys Glu Lys Gln Gly Gln Tyr His Arg Asp
283          130          135          140
285 Glu Gly Trp Lys Trp Gly Gly Cys Ser Ala Asp Ile Arg Tyr Gly Ile
286 145          150          155          160
288 Gly Phe Ala Lys Val Phe Val Asp Ala Arg Glu Ile Lys Gln Asn Ala
289          165          170          175
291 Arg Thr Leu Met Asn Leu His Asn Asn Glu Ala Gly Arg Lys Ile Leu
292          180          185          190
294 Glu Glu Asn Met Lys Leu Glu Cys Lys Cys His Gly Val Ser Gly Ser

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295          195          200          205
297 Cys Thr Thr Lys Thr Cys Trp Thr Thr Leu Pro Gln Phe Arg Glu Leu
298      210          215          220
300 Gly Tyr Val Leu Lys Asp Lys Tyr Asn Glu Ala Val His Val Glu Pro
301 225          230          235          240
303 Val Arg Ala Ser Arg Asn Lys Arg Pro Thr Phe Leu Lys Ile Lys Lys
304      245          250          255
306 Pro Leu Ser Tyr Arg Lys Pro Met Asp Thr Asp Leu Val Tyr Ile Glu
307      260          265          270
309 Lys Ser Pro Asn Tyr Cys Glu Glu Asp Pro Val Thr Gly Ser Val Gly
310      275          280          285
312 Thr Gln Gly Arg Ala Cys Asn Lys Thr Ala Pro Gln Ala Ser Gly Cys
313      290          295          300
315 Asp Leu Met Cys Cys Gly Arg Gly Tyr Asn Thr His Gln Tyr Ala Arg
316 305          310          315          320
318 Val Trp Gln Cys Asn Cys Lys Phe His Trp Cys Cys Tyr Val Lys Cys
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337 Val Gln Val Glu Val Val Arg Ala Ser Arg Leu Arg Gln Pro Thr Phe
338      35          40          45
340 Leu Arg Ile Lys Gln Leu Arg Ser Tyr Gln Lys Pro Met Glu Thr Asp
341      50          55          60
343 Leu Val Tyr Ile Glu Lys Ser Pro Asn Tyr Cys Glu Glu Asp Ala Ala
344      65          70          75          80
346 Thr Gly Ser Val Gly Thr Gln Gly Arg Ile Cys Asn Arg Thr Ser Pro
347      85          90          95
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VERIFICATION SUMMARY

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